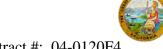
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-027598 Address: 333 Burma Road **Date Inspected:** 14-May-2012

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

CWI Name: William Sherwood **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: SAS** Components

Summary of Items Observed:

5-14-12

The Caltrans Quality Assurance Inspector (QAI) David Gray was at the American Bridge Fluor (ABF) job site between times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

The QAI observed the following ABF welders noted below performing 1G (flat position) Shielded Metal Arc Welding (SMAW) on the Seismic Performance Critical Member (SPCM) Complete Joint Penetration (CJP) splice butt joint using 3.2mm E7018-H4R electrodes with an average of 130amps. This welding was in progress for the duration of the shift. The welding consists of root and intermediate weld passes. At the 13W-A2.1 location Steven Davis ID# 7889, 13W-W2.1 and 13W-W2.3 Jacob Stafford ID# 8020, 13W-W2.2 Mike Jimenez, and 13W-W2.4 and 13W2.5 Edward Brown ID# 9331. QCI Inspectors William Sherwood was observed monitoring the welding parameters for compliance to ABF-WPS-D1.5-1040C-CU Revision 0 and measuring inter-pass temperatures between passes. The QAI verified that the electrodes were stored in electric rod ovens and appeared to be in accordance with AWS D1.5 Section 4.5.2 and exposure rates appeared to be in accordance with AWS D1.5 Table 4.7. During subsequent observations it was noted that the welders were using a power disc grinder and/or rotary die grinders at weld starts and stops as needed and were cleaning between weld passes with power wire wheel brushes.

The QAI observed ABF welder Ken Chappell (Welder ID 3833) in the process of performing cover pass welding utilizing the Submerged Arc Welding (SAW) process using F7A6-EM12K-H8 (1/8") diameter electrode Flux 10. 62 in the (1G) flat position on the (top side) at the following locations: 1) the Deck Plate Drop-in Section Transverse Field Weld Splice on Segment 13W-PP122.2. This weld segment is complete on the top side from Y+

WELDING INSPECTION REPORT

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1000 to Y+ 8650. The remainder of weld segment (Y 0 to Y+ 1000) to be completed at a later date. And 2) Deck Plate Drop-in Section Longitudinal Field Weld Splice on Segment 13W- W2.5. This weld segment is complete on the top side from Y 0 to Y+ 3500. The remainder of weld segment (Y+ 3500 to Y+ 5000) to be completed at a later date. The QAI observed the QCI verify splice fit-up and that the minimum preheat temperature was per the approved WPS, and afterwords verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS 4042B-1 Revision 1. The QAI observed the QCI verify electric Flux Ovens were in accordance with the temperature requirements of AWS D1.5 Section 4.8.3.

The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work appears to be in general accordance with the project plans and specifications.

Summary of Conversations:

Except as noted above no significant conversations were held on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Gray,David	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer